

IN THE CLAIMS

Please amend the claims as follows:

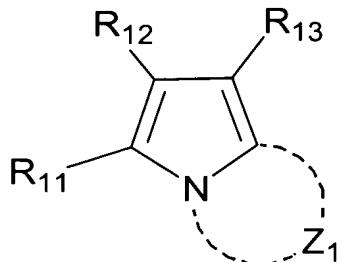
Claim 1 (Currently Amended): [[A]] An organic thin film transistor comprising:  
at least three terminals consisting of a gate electrode, a source electrode and a drain  
electrode; and

an insulating layer and an organic semiconductor layer on a substrate, which controls  
[[its]] an electric current flowing between the source and the drain by applying [[a]] an  
electric voltage across the gate electrode, a distance between the source electrode and the  
drain electrode being 1  $\mu$ m to 1mm;

wherein the organic semiconductor layer comprises a heterocyclic compound  
containing a nitrogen atom formed by condensation between five member rings each having a  
nitrogen atom at their condensation sites or between a five-member ring and a six-member  
ring each having a nitrogen atom at their condensation sites.

Claim 2 (Original): The organic thin film transistor according to Claim 1, wherein  
said heterocyclic compound containing a nitrogen atom is a compound expressed by a  
following general formula (I):

( I )

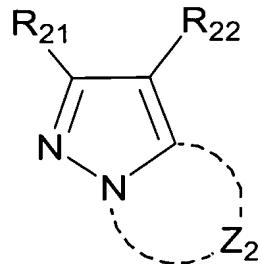


wherein R<sub>11</sub>, R<sub>12</sub> and R<sub>13</sub> each independently represents a hydrogen atom or a  
substituent; and

Z<sub>1</sub> represents an atomic group forming a five-member ring or a six-member ring.

Claim 3 (Original): The organic thin film transistor according to Claim 1, wherein  
said heterocyclic compound containing a nitrogen atom is a compound expressed by a  
following general formula (II):

(II)

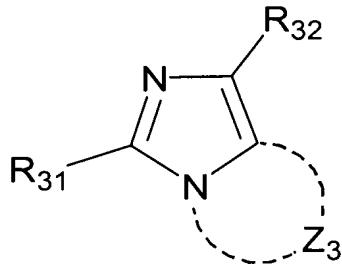


wherein  $R_{21}$  and  $R_{22}$  each independently represents a hydrogen atom or a substituent; and

$Z_2$  represents an atomic group forming a five-member ring or a six-member ring.

Claim 4 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (III):

(III)

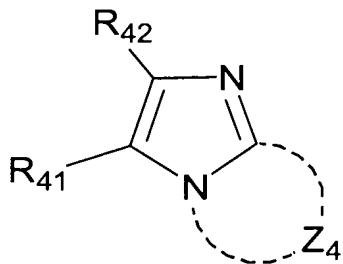


wherein  $R_{31}$  and  $R_{32}$  each independently represents a hydrogen atom or a substituent; and

$Z_3$  represents an atomic group forming a five-member ring or a six-member ring.

Claim 5 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (IV):

(IV)

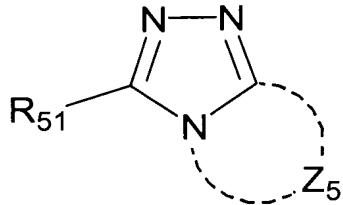


wherein  $R_{41}$  and  $R_{42}$  each independently represents a hydrogen atom or a substituent; and

$Z_4$  represents an atomic group forming a 5-member ring or a 6-member ring.

Claim 6 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (V):

(V)

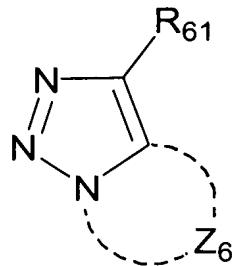


wherein  $R_{51}$  represents a hydrogen atom or a substituent; and

$Z_5$  represents an atomic group forming a five-member ring or a six-member ring.

Claim 7 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (VI):

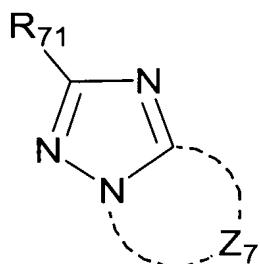
(VI)



wherein  $R_{61}$  represents a hydrogen atom or a substituent; and  
 $Z_6$  represents an atomic group forming a five-member ring or a six-member ring.

Claim 8 (Original): The organic thin film transistor according to Claim 1, wherein said heterocyclic compound containing a nitrogen atom is a compound expressed by a following general formula (VII):

(VII)



wherein  $R_{71}$  represents a hydrogen atom or a substituent; and  
 $Z_7$  represents a group forming a five-member ring or a six-member ring.

Claim 9 (New): The organic thin film transistor according to Claim 1, wherein the distance between the source electrode and the drain electrode is 5  $\mu$ m to 1mm.

Claim 10 (New): The organic thin film transistor according to Claim 1, wherein the source electrode and the drain electrode are formed on the insulating layer.

Claim 11 (New): The organic thin film transistor according to Claim 1, wherein the source electrode and the drain electrode are formed on the organic semiconductor layer.

Application No. 10/577,325  
Reply to Office Action of November 2, 2007

Claim 12 (New): The organic thin film transistor according to Claim 1, wherein the source electrode and the drain electrode are formed on the substrate.

Claim 13 (New): The organic thin film transistor according to Claim 1, wherein a field-effect mobility of electrons of the heterocyclic compound is  $1.0 \times 10^{-3} \text{ cm}^2/\text{Vs}$  or more.